

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-5 and 7-10 are pending in the application, with claims 1 and 8-10 being the independent claims. Claim 8 has been amended to correct a typographical error.

Claims 1-5 and 7-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,600,783 to Kakuta, *et al.* (hereinafter "Kakuta").

Based on the following Remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and they be withdrawn.

I. Claims 1-5 and 7-10 are Patentable over Kakuta

Claims 1-5 and 7-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kakuta. For the following reasons, this rejection is respectfully traversed.

Claim 1 recites "a controller mounted on said substrate for controlling the transfer of data to and from said at least one electronic data storage device." Claim 8 recites "a controller mounted on at least one of said plurality of substrates for controlling the transfer of data to and from said at least one electronic data storage device mounted on each of said substrates." Claim 9 recites "a controller mounted on said substrate for controlling the transfer of data to and from said data storage device and for controlling the transfer of data to and from said processing unit." Claim 10 recites "a controller mounted on said substrate for controlling the transfer of data to and from said at least one first electronic data storage device." In contrast, Kakuta fails to disclose, or even merely suggest, a controller mounted on a removable substrate for controlling the transfer of data to and from a storage device mounted on the removable substrate, as recited by claims 1 and 8-10.

Rather, Kakuta discloses a computer system having a CPU 1, an array controller 2 and a plurality of removable drive boards 5A. *See* FIG. 1. At least one disc drive 5 may be mounted on each of the drive boards 5A. *See* FIG. 1. The array controller 2 may include a motherboard having a channel interface circuit 3 and a signal bus 37. *See* FIG. 3. Each of the drives may be removably attached to the array controller 2 via the *common* signal bus 37. *See* col.4, ll.53-55.

Upon connection to the array controller 2, the array controller 2 may control the transfer of data to and from each of the disc drives 5 mounted on each of the drive boards 5A. *See* col. 1, ll.13-16, col.3, ll.15-32 and col.5, ll.51-64. It is worth noting that the motherboard/bus 37 is not mounted on any of the removable drive boards but is a fixture of the array controller 2 (*see* FIG. 3) and the removable drive boards 5A may be inserted and removed from the array controller 2 via the bus 37. *See* col.4, ll.53-64.

Upon connection of a removable drive board 5A to the array controller 2 via the bus 37, Kakuta explicitly discloses that the array controller “control[s] the operation of the[] disc drives” 5 mounted on each of the drive boards 5A. *See* col.4, ll.34-36. Specifically, Kakuta discloses that the channel interface circuit 3 may be used “for controlling data transfer.” *See* col.5, ll.46-47.

The Examiner alleges that, “[r]eferring to fig. 3 of Kakuta, a drive interface circuit 20 may be considered as a data controller.” *See* Office Action, ¶ 7. Further, the Examiner alleges that, while “the detailed function of interface circuit 20 is not given, [] it may be considered as similar to the interface circuit 30 [sic] shown in the same figure that comprises microprocessor 17 for a controlling operation as stated on col.5, lines 51-52.” *See* Office Action, ¶ 7.

While the Examiner is correct that the interface circuit 3 controls the transfer of data to and from the removable drive boards 5A (as discussed above), the Examiner’s contention that the function of the interface circuit 20 may be considered to be similar to that of the drive interface circuit 3 is unfounded. The interface circuit 20 disclosed by Kakuta is used to connect the drive boards 5A to the signal bus 37 to establish an electrical connection between the drive boards and the array controller 2 (*see* col.5, ll.56-64) and does not control the transfer of data to and from the disc drives 5 in any way.

The interface circuit 20 disclosed by Kakuta is not described in detail and it is certainly not described as being capable of performing the functions attributed to it by the Examiner. Rather, because the interface circuit 20 establishes a connection between the drive boards 5A and the array controller 2, and because the array controller 2 controls the transfer of data to and from the drive boards (*see* col.5, ll.46-47), it would be redundant to have two electrically connected circuits performing the same exact function. Therefore, the Examiner’s contention that the

interface circuit 20 may be used to control the transfer of data to and from the disc drives 5 is groundless and unsupported by the disclosure of Kakuta.

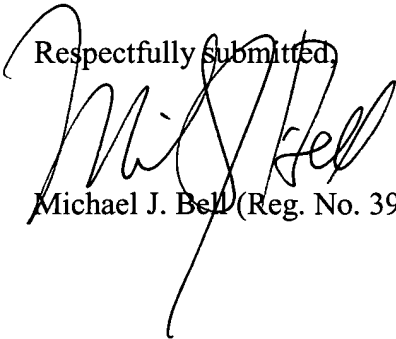
Because Kakuta fails to disclose or suggest the claimed apparatus including a controller mounted on a removable substrate for controlling the transfer of data to and from a storage device mounted on the removable substrate, claims 1 and 8-10 are allowable over Kakuta. Claims 2-5 and 7 depend from claim 1 and are allowable for at least these reasons. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-5 and 7-10 under 35 U.S.C. § 102(b).

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,


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